

CLAIMS

1. A process for the manufacture of a coating or doctoring blade comprising a band of steel or other form-stable material and a wear-resistant polymer coating applied on said band along a longitudinal edge section thereof subjected to wear, characterized by the following steps:

- a) providing continuous relative movement between said band and an application and treatment station;
- 10 b) continuously applying at said station a fast-curing polymer composition along said edge section;
- c) allowing the applied composition to spread out so as to reach the very extreme of said edge section and then to cure to form an elastic and tacky-free coating;
- 15 and, optionally
- d) post-curing the coating at an increased temperature.

2. A process for the manufacture of a coating or doctoring blade comprising a first band of steel or other form-stable material and a wear-resistant polymer coating applied on said band along a longitudinal edge section thereof subjected to wear, characterized by the following steps:

- a) providing continuous relative movement between a second band of double width compared to said first band and an application and treatment station;
- 25 b) continuously supplying at said station a fast-curing composition along a longitudinal central section of double width compared to said edge section;
- 30 c) allowing the applied composition to spread out to the desired width and then to cure to form an elastic and tacky-free coating and, optionally, post-curing the coating at an increased temperature; and
- d) longitudinally cutting said second band along the middle of the coated central section thereof to form two
- 35 tip-coated blades.

*SUB A<sub>1</sub> >*  
3. A process according to claim 1 or 2, characterized by roughening said edge or central section before application step b) to improve adhesion of the coating.

4. A process according to claim 1, 2 or 3, characterized by the application of a primer before application step b) to further improve adhesion of the coating.

5. A process according to any preceding claim, wherein said fast-curing polymer composition has a pot-life of about 5 to 30 seconds.

10 6. A process according to any preceding claim, wherein said polymer composition is based on a polymer selected from polyurethanes, styrene-butadien polymers, polyolefins, nitrile rubbers, natural rubbers, polyacrylates, polychloroprene, thermoplastic elastomers, and  
15 polysiloxanes.

7. A process according to claim 6, wherein said polymer is a polyurethane.

8. A process according to claim 7, wherein a 3-component liquid polyurethane composition containing a  
20 prepolymer, a polyol and a chain extender is continuously mixed with a catalyst solution and the mixture is then applied onto said band.

*SUB A<sub>2</sub> >*  
9. A process according to any preceding claim, wherein said polymer is applied with a width of about 5  
25 to 40 mms and a thickness of about 1 to 3 mms.

10. A process according to any preceding claim, wherein said polymeric coating after curing is subjected to a grinding operation to obtain a desired profile.

11. A coating or doctoring blade prepared by the  
30 process according to any one of the preceding claims.